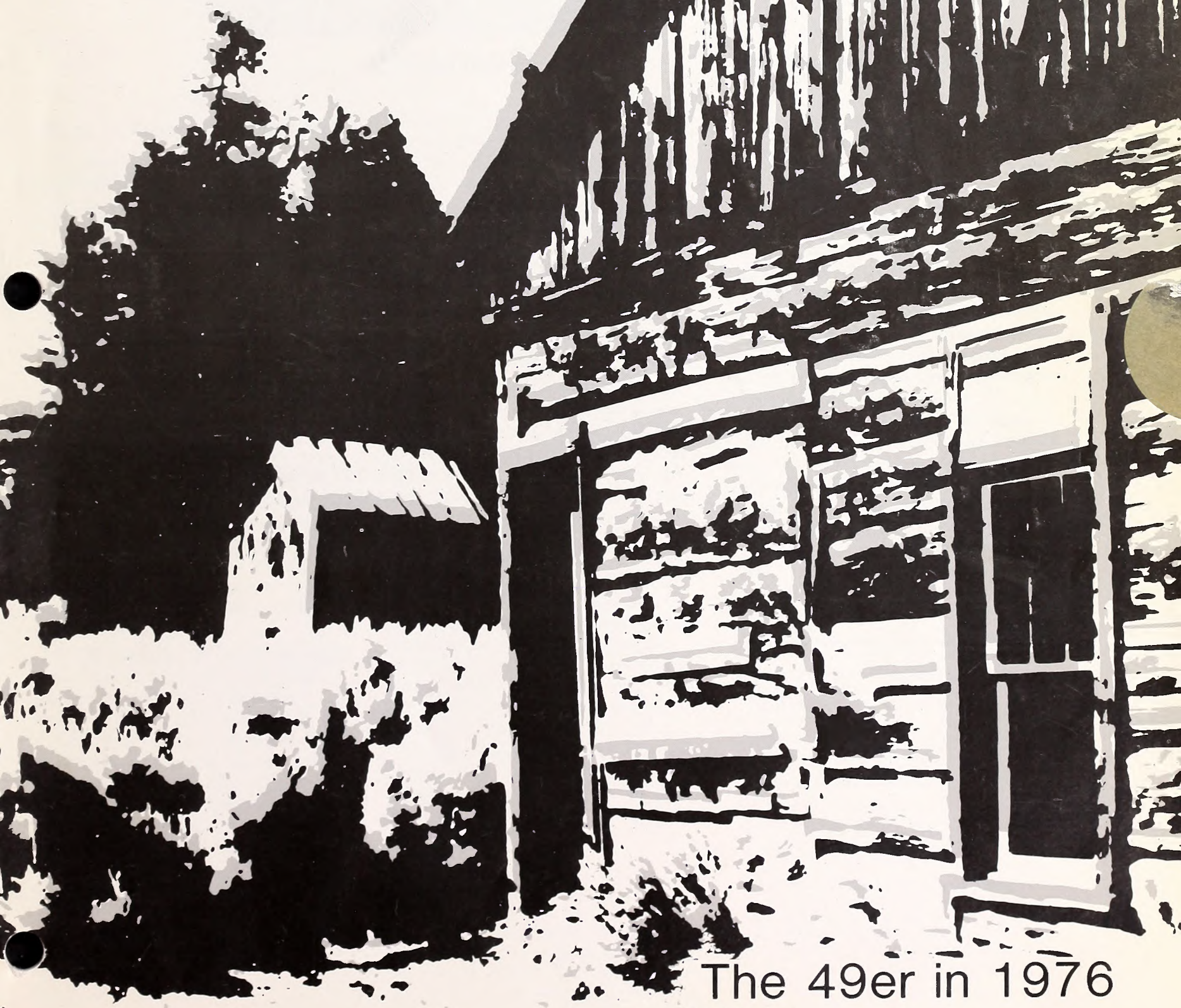


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The 49er in 1976

Page 4



U.S. DEPARTMENT OF THE
INTERIOR

BUREAU OF LAND MANAGEMENT
Curt Berklund, Director

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

OUR PUBLIC LANDS, the official publication of the Bureau of Land Management, U.S. Department of the Interior, is issued in January, April, July, and October.

Paul C. Herndon, Editor

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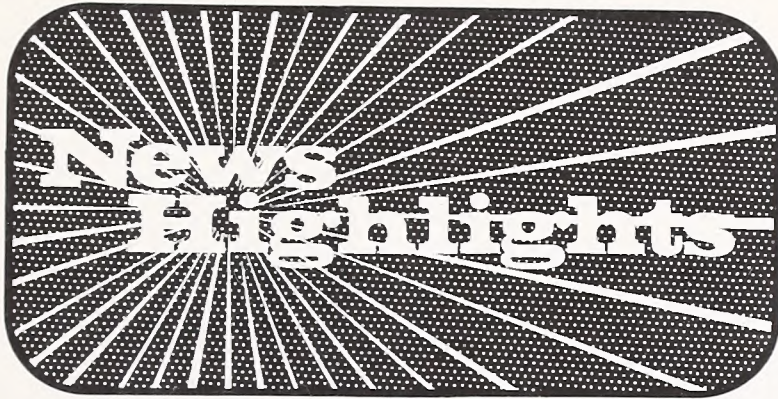
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Our Public Lands

Contents

- 4. **THE 49ER IN 1976**
 Evaline A. Olsen
 Colorado State Office
- 10. **BEGINNING AT CHALLIS**
 George L. Turcott
 BLM Associate Director
- 16. **LIVING HISTORY**
 Jerry Mason
 BLM Casper District Office
- 18. **THE 14TH STATE OF
 TRANSYLVANIA**
 Paul C. Herndon
 Office of Public Affairs



Energy — Outer Continental Shelf

★ Eighteen oil companies have nominated tracts totaling 10.9 million acres they would like to see offered if a proposed sale is held for the Georges Bank Trough off the coasts of Rhode Island, Massachusetts, New Hampshire and Maine. The proposed sale is tentatively scheduled for August 1976.

★ The Department has also asked for information about which tracts should be offered in a proposed oil and gas lease sale in the South Atlantic in an area known as the Southeast Georgia Embayment. The area covers about 20.7 million acres. It lies off the coasts of North and South Carolina, Georgia and Florida. Identified as OCS #43, the proposed sale is tentatively scheduled for November 1976.

★ The Bureau of Land Management has requested interested parties to provide information bearing on specific tracts that might be offered in an oil and gas lease sale proposed for the lower Cook Inlet on Alaska's Outer Continental Shelf. Federal authority over that portion of the Cook Inlet lying beyond the 3-mile limit was affirmed by a U.S. Supreme Court decision of June 27, 1975.

★ The Bureau published the final environmental impact statement for a proposed oil and gas lease sale off the coast of Southern California.

★ A \$4.6 million study of the

marine environment of a 10,000 square mile area off the coast of Southern California is in progress, Bureau spokesmen said. The OCS baseline study will eventually cover a triangular area from a point 100 miles west of the Mexican Border and 100 miles south of Point Conception landward to the coastline.

Other Energy Developments

★ A final environmental statement examining the impact of leasing Federally owned coal was released in September. The final statement describes in detail all aspects of the Department's proposed coal leasing program and the environmental impacts of individual leases or groups of leases within defined areas or regions.

★ The Department has also proposed changes in Federal coal regulations to expand environmental protection in the leasing and mining of Federal coal. The proposed regulations apply to all phases of coal development.

★ The Department has released results of a three-year, intra-agency study of possible impacts from developing the coal resources of the five Northern Great Plains states.

Alaska Natives

★ The Department has established a special region for the benefit of Alaska Natives who are not permanent residents of Alaska and who elect to enroll in such a

region under provisions of the Alaska Native Claims Settlement Act. Such Natives will receive a pro-rata share of the approximately \$1 billion cash settlement provided for in the Act, but they will not share in the selection of 40 million acres of Federal land awarded to the Natives under the Act.

Other Events

★ The Pryor Mountain Wild Horse Range, a 32,000-acre Federal reservation established for wild horses on the Montana-Wyoming border in 1968, is being expanded under new designations proposed by the Bureau of Land Management and approved by Assistant Secretary of the Interior Jack Horton. The new addition includes 11,742 acres of National Resource Lands.

★ More than 22 thousand acres of National Resource Lands in the California Desert have been set aside by the Department of the Interior as a natural area. The withdrawal, announced by Assistant Secretary Jack Horton, will protect scientific and historical values and provide a base for study of the rare desert pupfish.

★ The Department has issued an emergency order to protect coral reefs on the Outer Continental Shelf from an immediate threat of commercial exploitation. The order came after the Supreme Court had ruled that the State of Florida had no jurisdiction over those portions of the Outer Continental Shelf in the Atlantic Ocean beyond the 3-mile limit. However, the order is not restricted to those portions of the OCS off the Florida coast, but extends to all OCS areas.

★ New regulations for the management of the King Range National Conservation Area in California have been proposed by the Department. The King Range is a wild 54,000 acre coastal area in northern California. It was the first National Conservation Area to be set aside by Congress.

THE 49ER IN 1976

*Miners Take a New Look
at the Mineral Resources
of the Public Lands*

EVALINE A. OLSEN
Colorado State Office

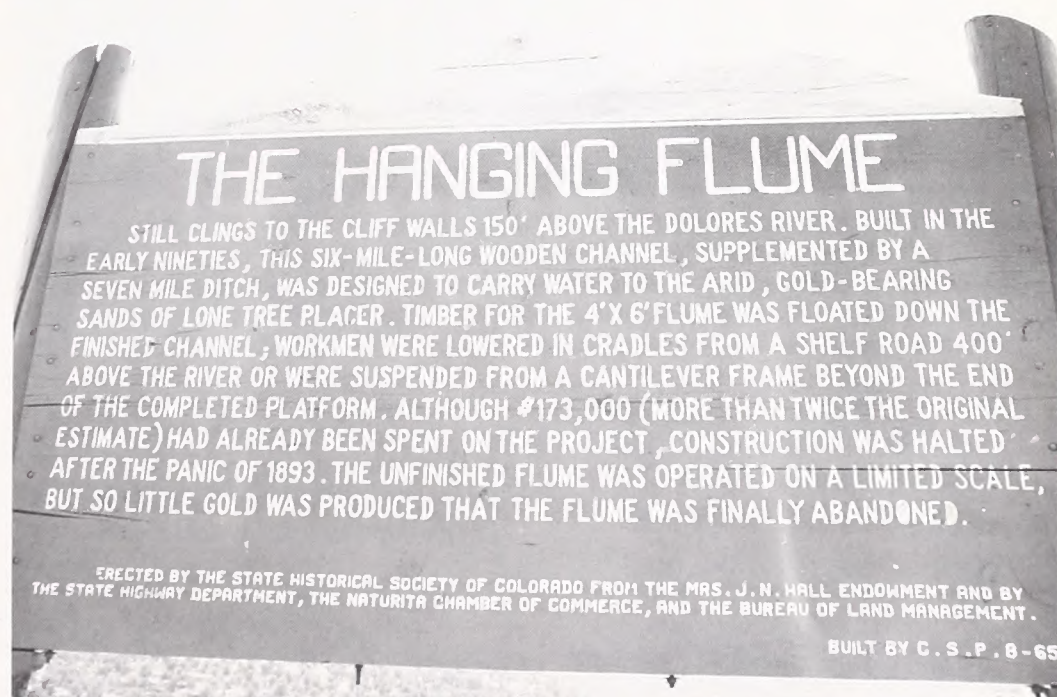
The battered gold pan, the rust encrusted pick and the shaggy faithful burro are but relics now. The crude mining camps have been replaced by the paneled board rooms of the mining corporation where manners are refined and technical jargon has replaced the salty language that characterized the miner's talk. But there is still gold in "them thar hills."

The "gold fever" that spawned the westward migration has soared and ebbed according to the whims of the market. Other metals such as silver, platinum, radium and uranium, if less exotic than gold, have frequently replaced the royal metal as the object of the prospector's dream. But hard rock mining still continues to be a major use of National Resource Lands in the West, and because of today's favorable market, the search for gold and other precious metals has enjoyed a revival throughout the West.

But it was the "yellow stuff" that started it all. In 1848 it began with the discovery of a single nugget (now on display in the Smithsonian in Washington) in the mill race of Johann Augustus Sutter's mill on the American



Built with high expectations, the Hanging Flume high above the Dolores River was intended to supply water for gold mining operations along the river. The high expectations were never realized and the flume is now in ruins; however, gold mines along the river still yield modest amounts of gold.



River near what is now Sacramento, California.

That discovery triggered the gold rush of 1849. Later discoveries in Colorado, Idaho, Montana and other western states brought their own influx of miners, and together they made a significant contribution to the settlement of the West.

Those were fabulous days. H. A. W. Tabor with his "Baby Doe,"

John Brown with his "Unsinkable" Molly, the feat of Otto Meers who pushed his "Million Dollar Highway" through, over and around the unyielding mountains to reach the gold fields were among the "rags to riches" sagas in the truest story book fashion the West had to offer. Yet they were more the exception than the rule. Even in those days, there were many who never made it.

And that is still the story. Not because the "precious stuff" is hard to find, and not because it is hard to mine. Modern technology makes it possible to extract metal from ore that a 49er would never have looked at. Dollars, or the lack of them, holds the key. The "grub stake" of the past simply does not cut it now. Today success in mining requires a broad financial base. Technology costs

dollars — dollars for core drilling, dollars for basic heavy equipment and dollars for meeting necessary standards of production.

Still mining offers opportunity to those having the right background. Miners, large and small, with a host of cheering citizens are today watching a young Coloradan who was born with a pick in one hand and a shovel in the other. David Mosch is a

subsequently married her after a number of rock-hounding dates. After David was born, he rode in a pack on his father's back while both parents prospected among Colorado's spectacular peaks.

A miniature pan and shovel were among his early toys, and while other boys were asking for motor scooters or maybe an automobile, David was pestering his parents for an honest to God

have picked up over the past ten years — usually for little more than the payment of the back taxes.

In true miner style, he collected the mineral-bearing rocks, and headed for George Treder's office to have them assayed. George is the one remaining assayer in Idaho Springs. The assay indicates that Dave may have found his gold mine. However, the Mosch's don't like to place a dollar value on possible discoveries. They well know that many a miner has sadly misjudged the value of his discovery during his excitement over finding his first glitter of metal.

David's reaction has been one of guarded optimism and cautious planning. If his discovery is as big as it appears to be, it will be a means of acquiring more mines and to increase his potential finds in the future. These will, in turn, finance his education to provide the training he will need in a world grown fiercely competitive for space and minerals.

The first question that naturally arises is: has David found something overlooked by earlier prospectors? The answer is "no." The original owners of the mine were well aware that there was gold in the ore they were discarding.

Why then was this ore discarded? The answer to this question is more complicated. The early-day prospector with his pan, pick and shovel was an inefficient miner who could profitably mine only those high concentrations of gold that had collected in the beds of streams from eons of erosion or the larger veins of metal that had been deposited in fissures of rocks through geological processes. Low grade ore had to be cast aside because it cost too much to extract the small amount of gold it contained with the technology available at the time. Modern technology has vastly increased the amount of ore that can be processed in a given period of time. The price of gold is a second factor. As everyone knows the price of an ounce of gold has increased dramatically since the Federal Government removed all price controls in early



Silt and gravel deposits like this one along the Arkansas River got close attention from the early gold panners. The action of running water eroded gold dust and small nuggets from the mother lode and deposited them among other sediments.

graduate of Clear Creek Elementary School at Idaho Springs, Colorado. That is not far from the spot where George A. Jackson scratched enough frozen soil from the stream-bed with his hunting knife to pan out \$9 worth of gold. By the next Spring Jackson was panning \$1,900 a week — a tidy sum for 1859.

David's story may prove equally exciting. He comes from a family that has mining in its blood. His grandfather fled from Prussia for political reasons and walked across half a continent to reach the Colorado mines. His father met his mother in a mine and

miner's lantern and a real sure enough hard hat. At the ripe old age of eleven he announced to his family that he was going to find a gold mine. That took a while, but it begins to look like he has found it.

David looks at rocks, sand or gravel like a farmer looks at soil, a timberman looks at trees or a hunter looks at spoor. His keenly honed instinct recently told him that there was some mighty interesting stuff on a hillside above Trail Creek, near what had once been a very productive mine. It was just one of 200 old mining claims the Mosch family

1974. Today it may be profitable to process ores paying as little as \$9 per ton. This means that mines closed because their vein of high grade ore was exhausted are now being reexamined throughout the West.

The search for gold continues with an intensity that, in many respects, rivals the efforts of the 1800s. But it is no longer the lone prospector leading his burro into the hills in search of the mother lode who bears the brunt of the effort. In special situations the gold pan and the sluice box still have a useful function, but today's prospecting has become extremely complicated. To have a reasonable chance of success, the modern prospector must have both knowledge and capital.

He must be able to recognize minerals and mineral bearing rocks in the field, be familiar with geologic structures and understand complicated processes using the latest instruments.

The Geiger counter is well known and prospectors have used it to find uranium and other radio-active ores, other instruments less well known, also have their uses and may spell the difference between success and failure in locating a mine that is economically viable. The same geological processes that concentrated metals and mineral ores in pockets also frequently hid them well. Sometimes they were buried under layers of soil or rock; at other times they were tucked away in fissures or hairline pores within the rocks; sometimes the metal desired was disguised by combining it with other substances to form an ore that looked entirely different from the metal. As the ore-bearing strata were eroded away, bits of the ore or sometimes the metal itself were carried down to be deposited with the sediment in stream beds or were leached out and left as trace elements in the soil.

The early prospectors paid special attention to the silt deposits left by streams. The gold pan and the sluice box retained the flecks of gold while the lighter sands and gravels were washed away.

Those early prospectors knew very well that the gold they found

in the stream beds was the product of erosion and all dreamed of tracing the trail of gold dust back to the "mother lode." At least some were successful and gold panning gave way to hard rock mining. Through the years mining has now largely exhausted the stream bed deposits of gold. The modern prospector now often takes advantage of the trace metals that have been leached into the surrounding soil to help them locate the richer deposits that will make mining profitable.

The advantage is that the area receiving the leached metal is much larger than the area that overlies the concentrated deposits. This makes them easier to find just as it is easier to find an elephant than a mouse. But careful mapping of the area containing the trace element can lead to location of the richer deposit.

The prospector must have a method of distinguishing between extremely small variations of the key element. The key element may occur in all soil samples, and what the prospector looks for is an area where the concentration is significantly higher than the average. For example, if most soil samples are found to contain trace elements of gold amounting to 0.1 part per million, but a given area has concentrations up to 1 part per million, the difference could be significant. The prospector would carefully map the area containing the higher concentration and hope to find a pocket of ore that would be profitable to mine.

To measure the tiny amounts of trace metals in the soil, the prospector may use one of several chemical processes and employ highly sophisticated equipment, but chemical processing is only one available method used in the search for valuable ores. The Geiger counter mentioned above is based on geophysical principles — measuring radio activity — and is useful in locating deposits of uranium and other radioactive ores. Some ores have magnetic properties and can be located through the skillful use of such instruments as the magnetometer and the dip needle.

Even the science of botany has



played a role in the search for deposits of metallic ore. Certain plants tend to absorb metallic solutions into their tissues that can be measured for indications of ore deposits hidden in the earth.

It is all to say that mineral prospecting has become extremely complicated and success is likely to be in direct proportion to the training and skill of the prospector. The novice might stumble upon a valuable deposit, but the odds are against it.

Throughout the State of Colorado, mining and search for precious metals goes on as higher prices for gold and other metals makes development more economically attractive.

Along the Dolores and San Miguel rivers in Southwest Colorado mining activity, while never on a grand scale, was occurring as early as 1878 and most of the less than \$400,000 production happened before 1909. Now the ragged and deserted six-mile Hanging Flume high above the Dolores River gives mute testimony to the tenacity of faith in the river's ability to yield "pay dirt." The workmen, hanging 150 feet above the river as they worked to anchor the flume to the cliff, never finished their job. The project was abandoned after the panic of 1893. The partly finished flume was used to bring water to wash the gold bearing sands of Lone Tree Placer mine, but even that limited use was abandoned because the yield was too low to make the operation profitable. But the hope remains — that somewhere within the silt deposit along the river's edge there are substantial deposits of gold.

One miner who has kept faith in the mineral potential of Southwest Colorado is Tom Youngblood who operates the Leeco Mine along the San Miguel River. Like David Mosch, Tom comes from a mining family. To him mining is a way of life, and he knows both the risks and the rewards.

Today his brothers are operating uranium mines, but Tom has built up an impressive placer operation. His days are long; he follows the rules, and he takes the profits, when they come,

with as much stoicism as he does his losses. Tom runs a 36-hour operation. Beginning at 8 a.m. on a given morning, he works sand, soil and gravel through his four sluice boxes with jets of water. Not until noon the following day, when he carefully gathers precious bits of gold dust from the riffles of his boxes, will he know if he's had a profitable operation. For every ton of material, he is satisfied if he takes a single ounce of metal. His operation is far from the source of gold, so any nuggets he gets will be worn pieces, shaped by the forces of erosion into intricate designs of startling beauty.

Madame Marie Sklodowska Curie, the great Polish physicist who discovered radium, visited the Slickrock area in San Miguel County of Colorado in the early 1900s. Her visit prompted a rash of filings for mining claims for radium. The fever burned bright, but radium mining was never profitable. During that period one corporation bought 3500 acres of ore-bearing lands in the Paradox Valley. Radium mining had already proved disappointing, but they were gambling on it once again becoming profitable. Instead of radium it was vanadium, abundant in the area, that the miners found profitable to mine. In that early day operation vanadium was taken from an ore known as carnotite which also contained large quantities of a troublesome metal called uranium. In those days uranium had no value and was discarded as waste from the mill. Tailing piles thus became the homely resting place for the useless uranium that later served as the detonating agent for the first atomic bomb and brought a dramatic end to World War II.

When the war was over, the Nation became caught up in enthusiasm over the possibilities of using atomic power for domestic uses. Suddenly there was a demand for uranium and the unsightly waste tailings of countless mining operations soon became the mother lode for a host of small prospectors, miners and geologists.

Those same metals, radium, vanadium and uranium still spark the economy of the west slope of Colorado. Individuals and corporations are working together to improve production methods and output.

The search for precious minerals goes on. In Idaho, the DeLamar Silver Mine near Marsing is expected to go into production in the fall of 1976. The owners, Earth Resources Company and the Canadian Superior Oil Company are primarily concerned with silver, but about one fourth of the mine's total value lies in its deposits of gold. The ore will be mined from open pits and the owners anticipate processing 1200 tons of material per day.

Public lands in Wyoming continue to provide sites for the development of uranium mines. However interest in the State's vast deposits of coal have tended to overshadow other kinds of mining activity for the time being.

Among the more important deposits of gold discovered in recent years are those found in Nevada. Near Carlin and Cortez prospectors have discovered significant quantities of a high grade fine grained gold that is expected to have an impact on the Nation's economy. The discoveries provide a good example of what improved technology has done for the mining industry. Early prospectors missed the deposit since the gold is intermixed with a shaley limestone as microscopic grains that can be detected only by use of sophisticated chemical processes. Further, it can be profitably extracted only through a complicated milling process.

The Carlin mine is now the second largest producer of gold in the Nation. Estimates place the ore body at 11 million tons, and it is believed that there are 3½ million ounces of marketable ore within the mine. The ratio of gold to ore is low (about .3 ounces per ton) but this is offset since the ore can be easily extracted (open pit mining) and modern technology provides an easy way to separate the ore from the metal.

Open pit mining appears to be the most economically feasible



The Union Carbide plant at Uravan, Colorado produces vanadium, radium and uranium.

method of removing fine grained gold. Today new thinking is making inroads into the ingrained traditions of the Nevada mining industry. Deep mines are not only costly, they are becoming increasingly difficult to staff. Years of training must go into the development of an effective underground miner. The old timers are leaving the mines and younger men are no longer attracted to the hardships of this kind of life.

If the complications of modern mining have forced the individual miner out of the western picture, it has not solved all the problems faced by the corporate miner. Open pit mining is both cheaper and less gruelling for the man who works in the mine, but it also has the greatest impact on the environment.

In the west most of the mineral resources are on land owned by the Federal government and administered by the BLM or by the Department of Agriculture's Forest Service. Both agencies are trying to find a proper balance between the nation's need for minerals and environmental considerations.

The mining industry points out that of the total land area of the

United States only 0.16% has been disturbed by mining activity. Of this disturbed area 40% has been reclaimed. On the whole, they say, mining has made much less impact on the environment than our nation's highway system.

Still the environmental considerations are not lightly dismissed. BLM's land managers give careful study, including hearing the public's input, into every application for a mineral lease.

This kind of control, however, does not apply to those minerals classified as locatable under the General Mining Law of 1872. Gold, silver and other precious metals fall into this category. According to the law a person finding a deposit of such a mineral can stake a mining claim. There is no provision that the Bureau or any other Federal agency even be notified that the claim exists, and the Bureau has no monitoring role in the mining operation.

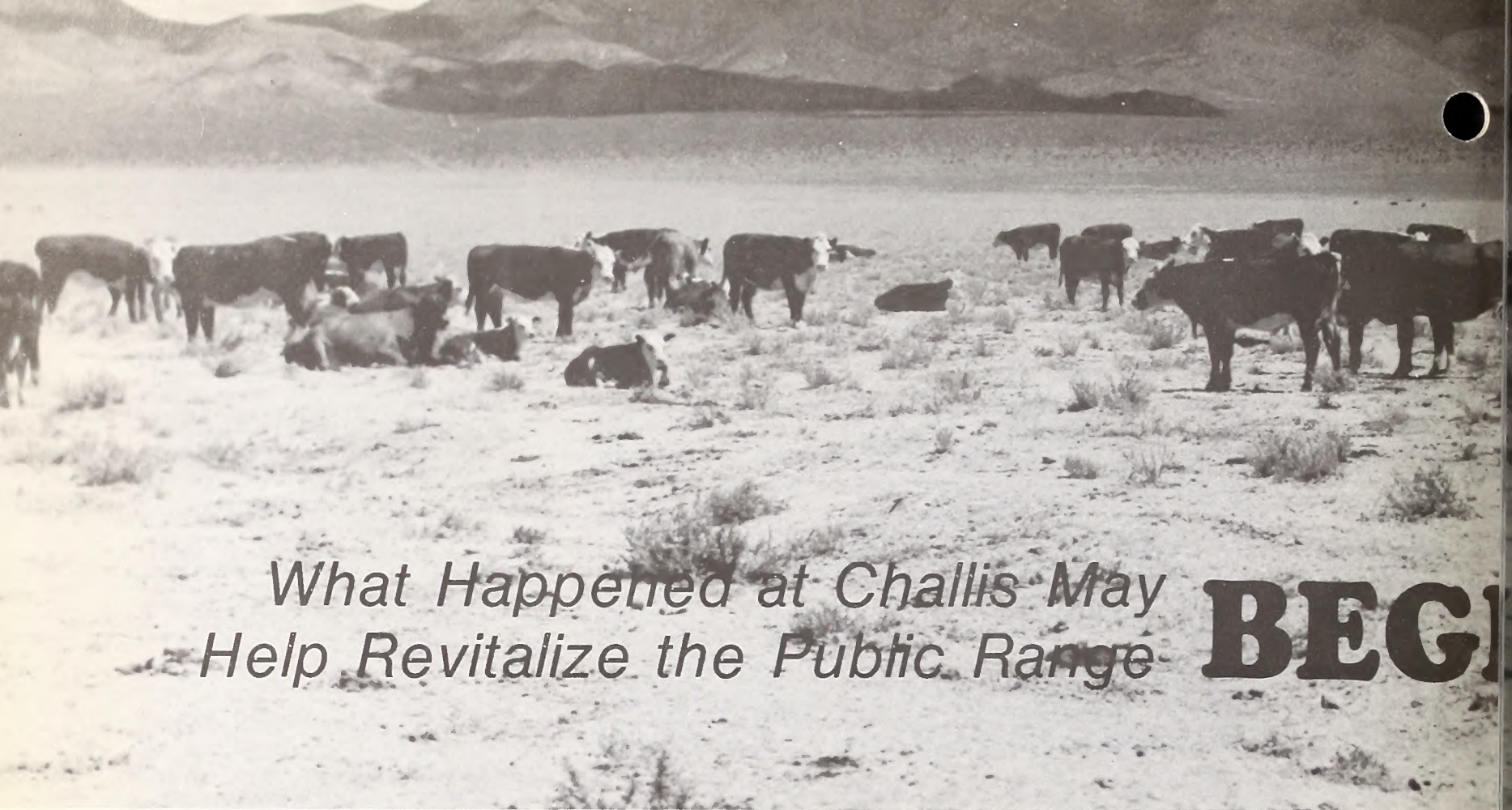
Until better legislation is passed, the Bureau's environmental control of these mines rests on gentlemen's agreements with industry. However, industry is deeply concerned with its environmental posture and progress is being made.

Many of today's miners well understand the role they play in maintaining the Nation's economic health. As Tom Youngblood expresses it, "Every ounce of gold I put on the market represents new money. The gold from our mines is there to back up our Nation's currency."

Gold and other precious metals can still be found on National Resource lands throughout the West. But the would-be prospector should remember that his chances of finding and extracting it are directly in proportion to his knowledge and financial resources. Finding a valuable deposit is still an individual challenge. There are no maps and no literature that will tell you where to look. The U.S. Geological Survey has prepared a pamphlet "Suggestions for Prospecting" that is available from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402. The pamphlet has a bibliography and other information that will lead the serious student to other sources of information. Regulations pertaining to staking of mining claims can best be obtained from Title 43 of the Code of Federal Regulations. This is also available from the Superintendent of Documents.



David Mosch concentrates on breaking out a bit of promising ore. Through people like David, the search for precious metals has taken on new life.



What Happened at Challis May Help Revitalize the Public Range **BEG**

GEORGE L. TURCOTT

BLM-Associate Director

Probably no romantic image of America's old West is as deeply imbedded in the national consciousness as hard-riding, free-spirited cowboys tending grazing herds of cattle that spread across the public domain after the Civil War.

Books, songs, and the Saturday afternoon movie over the years created a world of trailblazing, gunslinging fantasy that sometimes was at odds with the often harsh realities of routine existence facing cowboys and ranchers.

As a time and place forever frozen into the public consciousness, the old West represented a free-roaming way of life that for many comes close to the ideal human experience. Synonymous with that pastoral ideal have been the concepts of "free" grass for livestock and the unregulated use of the "open range."

But, the ideal was based upon finite resources — grass and land which had a limited capacity to replenish forage consumed by cattle and sheep.

Today the Bureau of Land Management, the agency that ad-

ministers grazing on the public range, is assessing the damage caused by nearly 75 years of unregulated use of the National Resource Lands. The "closer look" came as a result of a suit filed by the Natural Resource Defense Council in a Federal District Court in Washington, D.C., but the Bureau has been deeply concerned over the deterioration of the public range for a number of years. Now, as a result of the Court's decision, the Bureau has started to prepare environmental impact statements to determine the effect livestock grazing has on public land resources.

Frankly, the preparation of environmental statements was not the approach the Bureau wanted to take. Environmental statements, of themselves, solve no environmental problems, and the Bureau's range staff felt that they could achieve more with less cost and effort by working through the Bureau's planning system. But once the court had announced its ruling, BLM Director Berklund directed his staff to obey both the letter and the spirit of the court's ruling.

According to a court approved agreement between the Bureau and the Natural Resource Defense Council, the Bureau will prepare 212 environmental statements pertaining to livestock grazing on 150 million acres of National Resource Lands over the next 13 years.

The first of these statements is being prepared. It covers the Challis Resource Unit in Southeastern Idaho. The public lands in the Challis unit became the focal point in the public's concern over the condition of the public range, and it was here that the Bureau began its efforts under the Court approved agreement. The environmental statement prepared for the Challis unit will serve as a model for adaptation in other environmental statements that will be prepared over the next 13 years.

The Challis unit is unique only because the first of the environmental statements was prepared there. Other areas have the same problems and will require the same "closer look."

The question that naturally arises is: "How did we come to this impasse, or why were public



NNING AT CHALLIS

lands allowed to get in this condition?" The answer lies in the past, and we can fully understand only after taking a close look at the many forces that made the situation we have today.

Indians probably saw the recession of the last Ice Age and may have followed the retreating glaciers north to hunt buffalo and other game that fed on the grass that flourished in the wake of the retreating snow.

The retreating glaciers left their mark, and the climatic changes that followed fixed the physical features that are characteristic of the land today.

The effect of those who have lived on the land has been only slightly less than the effect of natural forces. For uncounted generations, the Indians lived off the land. Because their numbers were small, and because they maintained essentially a hunting-gathering society, they scarcely changed the land at all. Europeans came and destroyed the great herds of buffalo and filled the niche with herds of cattle, horses, and sheep. Farmers followed the herders, and where the soil was

fertile and water available, they fenced out the cattle. Where the soil was poor or where the land was too dry, rusting farm machinery and decaying buildings still stand as monuments of a hope that exceeded the capacity of the soil.

When it was done, the livestock operator was left with those fragile lands too poor to farm, but capable of growing enough grass to support a certain amount of livestock grazing.

The livestockman opened the West and became its symbol, he was a man molded by his history and his environment.

Historically, the western rancher grazed his livestock on public land. In the early years, one man's legal right to a given range was no better than another's and the competition for grass was often bitter. Because of this, there was little incentive for the individual rancher to think about what was good for the land or the future. Overgrazing was often the common practice, and it caused a steady decline in condition of the range. This in turn threatened the livestock industry with ruin.

The drought and the depression of the 1930's brought an already bad situation to a climax and there were demands for Federal regulation. The Federal Government became involved in the administration and management of public land grazing when Congress passed the Taylor Grazing Act in 1934. Responsibility for the administration of the law was given to a newly created agency: the U.S. Grazing Service in the Department of the Interior. With the help of local advisory boards (see "Are Advisory Boards Really Necessary?" OPL Summer 1975), the Grazing Service made specific allocations of public range to local livestock operators.

Present day critics of the Grazing Service often fail to consider the limited nature of that agency. It was a single purpose agency; it administered a single law — the Taylor Grazing Act; and it had a single constituency — the livestock operator.

We should also remember that the Grazing Service took over management of the public range only after extensive damage had already been done. Numerous In-

terior Department reports dating from that period detail the extent of the damage already done and offered the prediction that the range might never be wholly repaired.

Many of those early reports sought to arouse public concern, but most fell on deaf ears and the Grazing Service personnel continued to operate in a vacuum of public apathy.

Even in the Department, there was little understanding of the magnitude of corrective action needed. In his testimony before the Senate Committee for Public Lands and Survey in support of the passage of the Taylor Grazing Act, Interior Secretary Harold Ickes assured the Senators that he could administer the new Act for \$150,000 per annum.

On the other hand, some livestockmen were telling Congressmen that they could do the job themselves.

Despite many handicaps, the Grazing Service made a definite start toward bringing public land grazing under effective management. Ranchers were allotted specific portions of the range, and they were told how many animals they could graze; what seasons they could use the range and other details of range use were decided. If the deterioration of the range was not reversed, at least it was checked.

World War II brought the first definite setback. During that emergency, the production of food and fiber was given the highest priority. To encourage livestock production, western livestockmen were issued emergency license to increase the number of animals grazing on the public range.

Even the Lord knows that it is easier to give than to take away, and ranchers having war-time emergency license for increased range use found many arguments to use in persuading Grazing Service personnel to let the increase stand for one more year, and then another, long after the War and the emergency was over.

In the meantime, the Congress combined the functions of the Grazing Service and the General Land Office into a new Bureau of

Land Management. In the early 1950's, the Bureau set a 10-year goal to bring actual grazing use into balance with the carrying capacity of the range.

In their efforts to meet the 10-year goal, many of the Bureau's district managers made some concessions to individual ranchers that were inconsistent with the hard realities of the land's ability to produce forage. In some cases, they failed to provide adequate forage for wildlife, and in almost every case they overlooked the forage consumed by wild or unlicensed horses.

In those days, Bureau personnel believed that the ranchers would still do the job themselves as soon as each man had his own particular allotment of range and could manage it as he saw fit.

The process was completed by the mid 1960's and now the Bureau started to think in terms of more intensive management of the individual allotments. A 10-year goal was set for completion of all allotment management plans. The allotment management plan was a system of grazing management worked out between the Bureau and the rancher, and it was a further refinement of the Bureau's efforts to bring forage consumption into line with what the land was able to produce.

But now other factors were starting to make themselves felt. For one thing, public apathy was giving way to public concern.

At the same time, other user groups were discovering the public lands. In addition to the traditional hunter and fisherman, recreationists of every stripe were coming to the public lands to find their own particular outdoor experience. Some, like the off-road vehicle users, were having a significant impact on forage production.

In all cases, the range manager and the rancher were dealing with a finite resource. Much of the public range could be classified as fragile lands. Once the vegetative covering of such land is damaged or destroyed, it may take generations for the land to recover. When the thin soil layer is washed away, it may take centuries for nature to rebuild it.

In a balanced relationship, cow, horse, or another animal does not harm vegetative covering by grazing. In fact, many desirable range plants thrive under moderate grazing, just as yard grasses are improved by mowing. Overgrazing is another matter. Too many cows or other livestock pastured in a given area will crop the individual plant faster than it can grow new foliage, and the plant eventually dies.

Effective grazing management is basically simple. Find out how much forage a specific tract of range land will produce, then make sure that the number of animals allowed to graze there is not more than the range can feed without endangering the vegetative covering. Here, we should remember it makes absolutely no difference whether domestic livestock, wildlife, or unlicensed horses or burros eat the forage; it's the total consumption that counts.

What is basically simple often becomes complex in operation, and so it is with range management. Public land grazing has economic, social, and political impacts. It affects the well-being of ranchers and ranching communities. It is often in conflict with other public land uses, and the cost of management and supervision enters into the realm of Federal financing.

Any or all of these considerations may dictate compromise, yet every compromise erodes away the resource base. Eventually the chickens will come home to roost.

BLM range people knew that they had problems, and warnings came both from official reports and from articles in the popular press written from outside the Bureau. These warnings were generally ignored by both the policy makers and by the livestock industry. Policy makers were concerned with keeping down expenditures, and the livestock industry feared increased Federal control over their grazing operations.

But, by 1970, the chickens were really coming home to roost as the National Environmental Policy Act with all of its many ramifications began to take shape.



It is easy to see the contrast between good and poor livestock range in this picture.



Areas near livestock water are especially susceptible to livestock damage. Cows overgraze near water and plants are also destroyed by constant trampling.

Renewed public interest in the condition of the public range was aroused by such articles as "Nibbling Away at the West" which appeared in the December 1972 *Readers Digest*, and Jim Morgan's article about the plight of the Bighorn Sheep in the Challis area that appeared in the September 1973 *National Geographic*.

At the same time, other problems were demanding their own share of the Bureau's attention. The Wild Horse and Burro Act added a new dimension to the range program. Under the protection it affords, wild horses and burros have increased their population to the point where they have become a significant consumer of public land forage. In some areas, they pose a serious threat to achieving or maintaining a balanced ecosystem. Public interest may be more concerned over the plight of the wild horse than in any other area of the Bureau's responsibility. It certainly has generated the largest volume of correspondence in the history of the Department of the Interior.

Along with this, the Nation came face to face with an energy crisis that demanded the time of a large segment of the Bureau's

personnel, and inflation ate into the Bureau's budget at a rate that has not been compensated by budgetary increases.

In short, despite dollar increases, the Bureau's 1975 budget will buy \$8 million less in goods and services than its 1966 budget.

In the meanwhile, conservation groups and other citizen's organizations became impatient with the lack of progress being made in arresting declining range conditions. In October 1973, the practice of issuing grazing license and permits was singled out as a significant Federal action impacting the human environment, and suit was brought under the National Environmental Policy Act. The decision of the court reached this year was in favor of the plaintiffs, and both plaintiffs and the Bureau were ordered to reach an agreement on a schedule for the preparation of environmental statements in support of the grazing program.

That agreement calling for the preparation of 212 statements to be prepared over the next 13 years has been reached. It has required the Director and his staff to make some far-reaching policy decisions.

While BLM had disagreed with

the plaintiffs over the method of approach to range management, there was no disagreement concerning the desirability of improving the condition of the public range and none concerning the need.

BLM's own reports and publications have supported the need for more intensive management of public land grazing through the years.

At the same time, the Bureau recognized that the preparation of an environmental statement of itself accomplishes nothing. What the Statement does do is to identify and document the problem, point out alternative actions that may be applied, and what measures are needed to improve range conditions.

BLM range people felt that the environmental statement could be more effective if it were dealing with a proposed plan of management. In view of this conviction, they decided to incorporate the preparation of environmental statements into the Bureau's total planning system.

Along with the environmental statement, the Bureau will prepare allotment management plans (AMP's) in cooperation with individual ranchers. The AMP is a



Good grass and fat cattle are some of the objectives of BLM's program for the public range.

The Joshua tree is found in desert soils, but with careful management this desert range provides a season of good grazing.



proposed plan of action. It deals with a specific tract of range, and it provides a specific management program that considers livestock grazing in relation to other possible uses of the range. It sets seasons of use, the number of domestic animals that will be allowed on the range, and possible range improvements such as fencing and water development. But it will also consider the needs of wildlife, wild horses, and the

impact of other user groups such as off-road vehicle groups, campers, hikers, miners, etc.

Once the AMP has been developed, the EIS team then will have a specific program to deal with. The Statement would then deal with the environmental impacts of implementing that specific program. In addition, the Statement would also consider possible alternatives to the proposed AMP. Among these alternatives would

be maintaining the status quo, having no livestock grazing, and possible variations of the proposed program.

According to an agreement between BLM and the plaintiffs, no AMP's will be implemented until the final EIS for the area has been completed.

The Challis area was selected as the starting point for the 212 environmental statements because it was an area having complex



Cows rotate to a new pasture. Periodic change of pasture allows forage plants time for renewal. Rest rotation is one technique for preventing overgrazing of the public range.



In the long run no one profits from overgrazing. Ground cover is destroyed, erosion tears away the soil, and poor cattle cut the owner's profits.

resource values and a variety of uses of the public land within the unit. Furthermore, not only had the basic planning data needed to complete the environmental statement already been assembled but the area also had a high priority for intensified grazing management in the eyes of both the Bureau and the plaintiffs.

It was recognized that the environmental statement produced for the Challis unit would become

the model for adaptation in subsequent grazing statements.

In view of this, the Bureau assembled teams for both the environmental statement and the allotment management plan whose members had experience and expertise representative of the best the Bureau had to offer.

Team members were drawn from six States and the Bureau's Washington Office. Members held degrees — some advanced — from seven universities, and expertise ranged through such disciplines as range science, geology, wild horses, wildlife, fisheries and aquatic biology, real estate, forestry, watershed management, and agriculture. The total professional experience of the two staffs and the review panel set up to review the work of the AMP teams would amount to several hundred years.

What has happened at Challis is only the beginning. Once the statement has been written, compiled, polished, and printed, it will be submitted to the public for its review. Debate should be spirited and vigorous, and from the comments, criticisms, and suggestions that come out of the public's review, the team will sit down once more and prepare a final statement. That final statement will reflect the public reaction to the draft, and the information contained in the final statement will be used to reach a final decision about implementing the Bureau's allotment management plan.

But, Challis is also a beginning in another way. In the years to follow, other special teams will be assembled in other BLM districts all across the West to prepare, one by one, the remaining 211 environmental statements. In terms of money and time, the effort will be substantial, but if the final result is to restore the National Resource Lands to their potential productive capacity, if cows can graze on good grass, if wildlife becomes abundant, if wild horses can find a niche, and if future generations can learn about erosion and overgrazing only from history books, then the results will be worth the cost.

BLM Participates in a Project to Make History Come Alive

LIVING HISTORY

JERRY MASON

BLM Casper District Office

A camp in the snow made the hardships of a winter campaign more realistic. The snow made it easy for those students playing the part of the soldiers to track their classmates playing the part of Indians.

Clark Whitehead, a recreation specialist in the Casper District's Buffalo Resource Area recently helped make Indian History come alive for 29 junior high school students from Aspen, Colorado. The students from Aspen Middle School wanted to recreate some of the things they were reading

about in Mari Sandoz' book "Cheyenne Autumn."

The book is based on an attempt by a band of Cheyenne Indians to escape from an Indian Reservation in the Fall of 1878. The leader of the band was a chief named Dull Knife, and the reservation was near Fort Reno in



A student plays the part of an Army sentry at old Fort Laramie.



Pawnee Butte had a special meaning to the Indian. The students visited the site to absorb background for their project to make history come alive.

Indian Territory, now within the State of Oklahoma.

Accounts of what led to the escape and of what happened afterward vary greatly, but we do know that the band was pursued and overtaken by troops from the United States' 4th Cavalry. In the battle that followed about half of the Indians were killed and the rest taken to Fort Richardson in Wyoming.

When orders came for the survivors to be returned to Fort Reno, they refused to go. Soon after they killed their guards and broke out of the barracks where they were being confined. They fled from Fort Richardson, but twelve days later were surrounded in a ravine about 50 miles from the fort. When the commanding officer of the troops asked them to surrender, the Indians fired on the troops. In the ensuing battle all but a few of the Indians were killed.

In order to get the Indian's point of view as well as that of the soldiers, the students reenacted various scenes of the flight of Dull Knife's band as depicted in "Cheyenne Autumn." The students visited the Denver Museum of Natural History, Pawnee Butte in the Pawnee National Grasslands north of Greeley, Colorado and then old Fort Laramie in

southeastern Wyoming. This was to give the students background information for their reenactment of the chase to the north.

Whitehead made all the necessary arrangements for the students to use various sections of BLM and private land in the Dull Knife Battlefield area in the southern foothills of Wyoming's Big Horn Mountains. He also coordinated the use of land owned by three nearby ranchers and oriented the students to the area and explained its historical significance when they arrived.

On the battlefield, the students relived a tragic scene. Mike Flynn, one of the students' teachers played the part of Little Wolf and took half of the class to represent the Indians. Dave Roupp, another teacher, became Lt. Casper Collins of the United States 3rd Cavalry and the rest of the students became soldiers. Both groups were on foot. The soldiers were armed with tennis balls to simulate weapons — the Indians had nothing.

The objective was for the soldiers to hunt down the Indians and to "kill" them by hitting them with a tennis ball. The students representing the Indians tried to remain hidden and escape. As soon as an Indian was "killed" he became a soldier, thereby simu-

lating the fact that the soldier's ranks increased as the Indians' numbers diminished. Mike Flynn, who played the role of the Indian Chief said, "The Indians always had the soldiers in sight, but the soldiers often couldn't find the Indians. One night the Indians hid in the willows just five feet from the soldier's camp. Eventually though, the Indians were "killed" and our numbers dwindled. Finally we were pushed into a valley from which there was no escape."

One of the students described the scene, "... we were spotted running around the butte. We ran along a ravine trying to find a hiding place. At that time I was actually afraid. I knew that it was just a game, but the two days of living and being a total Indian made it seem so real. Even though we were exhausted, we had to try to climb out of the ravine and get out of the range of the soldiers, but we never made it."

The soldiers "killed" all the Indians. The students were so involved in their roles that several lay down and cried when they were "killed." One girl said, "It really hit me for the first time what really happened to the Indians ... how awful it must have been."

Afterwards the students were debriefed and talked about what they had learned. One student said, "We learned more about the feelings of both sides from dealing with the same circumstances than we could ever get out of a book or from a classroom situation."

After the exercise was over, the students presented Whitehead with a certificate of appreciation for making it all possible. They also thanked the ranchers for the use of their land. The ranchers were Norris Graves, A. B. Brock and Sons, and the Brock Livestock Company, all of Kaycee, Wyoming.

The outdoor history class was a four-day affair. The school held two sessions of the class in May using a different group of students from the same school. The class was popular with the students and the school is making plans to repeat the program during the coming school year.



*A Dream That Failed Provided
the Incentive That Started
Our Westward Expansion*

The 14th STATE of TRANSYLVANIA

PAUL C. HERNDON

Office of Public Affairs

While the Colonies were in the midst of the American Revolution, enterprising colonials were already petitioning both the Continental Congress and the Virginia Assembly to grant recognition to the 14th state of the Union. According to the petition, the new state would be called the State of Transylvania.

The chief architect of the Transylvania venture was Judge Richard Henderson. Henderson was the foremost figure among the group of influential North Carolina citizens who had organized the Transylvania Company in the hope of making money out of western land. It was among the first of a number of companies organized in the colonies to promote settlement of the vast areas of empty land that lay beyond the settlement line. It was the first Company to successfully establish settlements beyond the 1763 Proclamation Line.

In 1774 Henderson and his

associates purchased a vast tract from the Cherokee Indians. Lying in an approximate triangle formed by the Ohio, Kentucky and Cumberland Rivers, the tract comprised more than half of the present State of Kentucky. Henderson paid approximately \$10,000 in trade goods to a Cherokee chief named Little Carpenter for the Indian rights to the land. In the aftermath of this purchase, we glimpse the conflict of cultures that became the pattern of subsequent dealings between the Europeans and the Indians. For soon there arose all the misunderstandings that would so often frustrate the white man who tried to buy land from the Indians. To the European, land was a commodity to be bought and sold in the same way a man would buy or sell a pair of shoes. To the Indian, land was a natural gift like rain, wind or sunlight. Rarely did the Indian intend to sell what the white man intended

to buy. Because of this difference in cultures, and the inability of one to understand the other, the best of the white man's intention to deal fairly with the Indian would always be frustrated.

First the European confused the role of the Indian chief, with that of their own 18th century monarchs. In Europe the king was the man to deal with, but among the Indians a chief was a man of influence whose opinions and decisions carried a certain amount of weight, but were not necessarily binding on other members of the tribe.

In this instance, many in Little Carpenter's own tribe, including his own son, Dragging Canoe, were opposed to the sale of land. Dragging Canoe warned that the sale, now known as the Treaty of Sycamore Shoals, would cause war between the Indians and the whites.

It also seems probable that the land in question did not belong to

the Cherokees. Other tribes certainly claimed the right to hunt in the area.

Yet it seems that Henderson bought the land in good faith, believing that he was dealing fairly with the Indians. There is less reason to believe that he did not know that his deal was contrary to English law.

As a young man, Henderson had been admitted to the bar in the Colony of Virginia after a scant year of reading law and had astonished his examiners with the thoroughness of his knowledge. A brilliant lawyer certainly knew that it was forbidden for private persons to make treaties with the Indians and that settlement beyond the Appalachian Mountains was illegal.

In the light of Henderson's legal training, it becomes significant that his purchase of Indian land came shortly after the first Continental Congress had convened in Philadelphia. It seems certain that Henderson was counting on an American victory to protect his investment and give reality to his dreams.

But he had failed to gauge the mood of his own countrymen and

was guilty of poor timing. He laid his proposal before the Virginia Assembly at a time when many Assemblymen were hoping for a compromise of differences between them and the Mother Country. To approve a plan so blatantly in defiance of English law threatened to jeopardize all hopes of reconciliation.

Even though settlement was already well underway, the Assembly followed Governor Patrick Henry's recommendation and refused to approve the Transylvania project. Eventually the Assembly declared the purchase illegal. Actual settlers were granted the land they had already claimed and instead of the millions of acres purchased, the Company was granted title to a mere 200,000 acres.

In promoting settlement, the Company was faced with a problem of access. There were no roads beyond the mountains, and the land was covered with a dense deciduous forest that made cross-country travel difficult if not impossible. To solve this problem, Henderson hired a 41-year old frontiersman named Daniel Boone.

Boone was the son of a Quaker who had left Pennsylvania because he had fallen out with other members of his church. Squire Boone, Daniel's father, had moved his family to North Carolina in 1750 and had settled in the Yodkin Valley.

There Daniel grew up, and on August 14, 1756 he married Rebecca Bryan. He bought land from his father, but had no interest in farming. Beset with a restless spirit, he moved about, living for a while in Virginia, then investigating the possibilities of settling in Florida. He decided against the Florida venture and went to have a look at Kentucky. He liked what he saw in Kentucky and went back to North Carolina for his family.

Persuading his wife's family to move with him, they all returned to Kentucky. Their stay was a short one. The party was attacked by Indians. Boone's own son was captured, tortured and killed. They all went back to North Carolina, and Boone served for a time in the militia.

Boone went back to Kentucky in 1775 — this time as an employee of the Transylvania



A BICENTENNIAL SERIES

Throughout the Bicentennial Year "Our Public Lands" will continue to publish historical articles designed to help our readers understand how we developed our present public land policies and how the vast areas of our public domain influenced our nation's history.

At one time or another 1.8 billion acres of our total land base has been a part of our public domain. It began at the crest of the Alleghenies and eventually extended to the Pacific coast.

Public land policy started to take shape before the Revolution was finished, and we adopted the Ordinance of 1785, which still influences public land policy, before we adopted the Constitution. The first rules and regulations that governed the disposal of public land were first applied to land in Ohio.

The evolution of ideas and the occupation of land are, for the most part, what the past 200 years have been all about. Now as we celebrate our 200th birthday it seems fitting that we remember how we developed as a nation and as a people.

Until recently, we were a people with a frontier, and the frontier had a lot to do with the development of our national character.

The story of the public domain is also the story of westward expansion, the story of the cowboy and the Indian, the mountain man and the fur trapper, the prospector and the miner. It is above all a "people" story.

Our westward migration, between 1840 and 1860, is unique in the history of the world. The northward trek of the South African Boers was its closest parallel, but they traveled less distance and there were fewer people involved. It was empty land that made the migration both possible and necessary, and it was the land and land resources that drew men to the west.

Daniel Boone and James Robertson were among the first men to lead settlers through the mountains, and it is revealing that a grandson of Daniel Boone was among those settlers involved in the conquest of California.

With only 200 years of history, the United States is a stripling among nations. Most of the public domain has now passed into private ownership as envisioned by the founding fathers, but we still possess a public domain that is larger in area than any nation of Europe except Russia. In the final analysis, that land is yours and mine along with more than 200 million other Americans. It has been called our "Last Frontier."

These articles are based on a search of existing literature. Therefore, the stories we tell will not be new — but many may have been forgotten. We hope that you will enjoy the series.

Company. In March he led a party of 30 axmen into the wilderness to clear a road.

Starting on the bank of the Watauga River, where a settlement was already thriving, Boone and his axmen cleared a road through Cumberland Gap, and from there, roughly northwest to the point where Otter Creek joins the Kentucky River. The "Wilderness Road" as it soon was called, survived Boone and the Transylvania Company. By 1800 more than twenty thousand persons had traveled it in search of virgin land.

Boone and his men did not have to find their way unaided. For the most part the road followed existing Indian trails, just as the Indians had once adapted the game trails made by wild animals to their use.

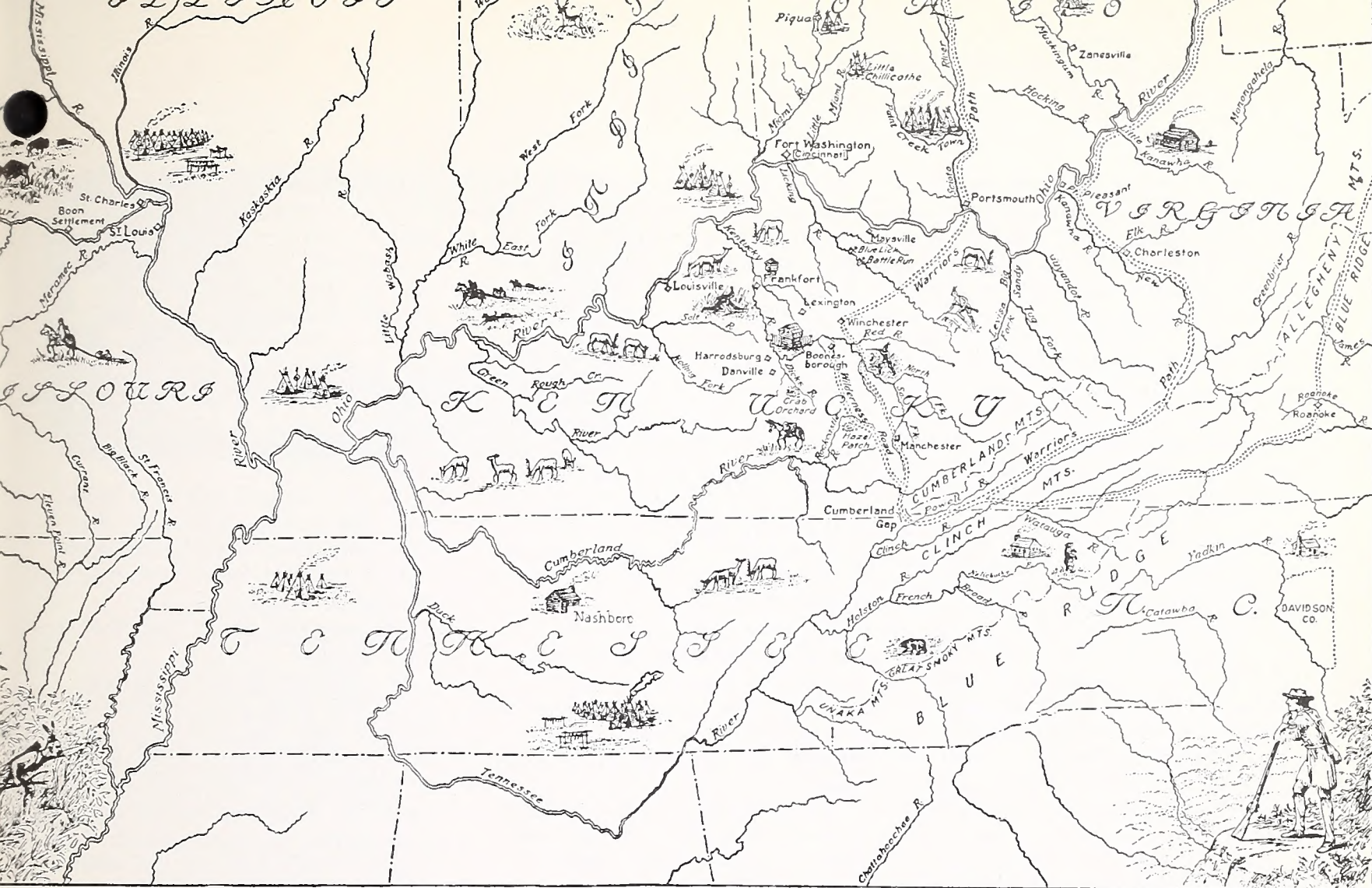
Boone blazed the way so that the traveler would know which fork to follow as he reached each of the trail's many branchings. When necessary they chopped down trees or removed fallen logs so that packhorses and later wagons could get through the forest.

At the mouth of Otter Creek, Boone and other settlers built a stockade that became the nucleus of the frontier town of Boonesborough. This site is near the present city of Lexington, Kentucky.

Later a new branch of the Wilderness Road led to the settlement made by James Herrod. This settlement grew into the town of Herrodsburg, Kentucky. From Herrodsburg this branch was eventually extended to the south bank of the Ohio River where George Rogers Clark had drilled his militia prior to launching his campaign against the British in the Northwest Territory.

The settlement there became the City of Louisville and this branch would later become the main fork of the Wilderness Road.

At the time Boone started to build the Wilderness Road, the settlement where he started on the bank of the Watauga River was already six years old. William Bean built the first cabin there in 1769. He was soon joined by others who assumed that they



were settling in Virginia. In 1772 these settlers had set up their own government which they called the Watauga Association. In creating their Government they wrote the first Constitution ever to be adopted west of the Appalachian Mountains.

James Robertson was among those who were active in setting up the Watauga Association. Sometime before 1775, Robertson fell under the spell of Judge Henderson. By then, Henderson's dream of founding a state west of the Mountains had been shattered by the Virginia Assembly, but the incurable old optimist was still promoting settlement of the west. In the same year that Boone cut the Wilderness Road, Henderson took Robertson on a trip to look at western land. Five years later (1780) he persuaded Robertson to return to establish a settlement on site on the Cumberland River they had examined together.

Robertson enlisted the aid of Colonel John Donaldson. In Virginia Donaldson was counted a

"gentleman" with all the 18th century connotation of the term. He was well born — the Great Nephew of the first President of Princeton University. Like most educated men of his day, he was a skilled surveyor and had served in the Virginia House of Burgesses. Once a man of substance, he had lost his fortune from a bad investment.

The Donaldsons were a close-knit family, but now, coincidentally with near bankruptcy, the family started to break apart. An elder daughter married and moved to Louisiana. A son became engaged and announced that as soon as he was married, he and his bride would move to Kentucky.

As a business man, Donaldson had traveled in North Carolina, where he got to know James Robertson. At Robertson's urging, he decided to go to Kentucky with his son.

According to their plan, Robertson left Watauga ahead of the main party. He traveled overland hoping to reach the Cumberland in time to build essential shelter and get a crop of corn planted before the main party arrived. Donaldson led the main party which traveled at a slower pace down river.

Robertson reached the Cumberland on Christmas Day, 1779. Donaldson in his own boat, the Adventurer, was then leading a fleet of flatboats down river. They floated down the Holston River to the Tennessee, down the Tennessee to the Ohio, up the Ohio to the mouth of the Cumberland, and finally up the Cumberland to the site where Robertson was waiting to welcome them. All told, Donaldson led 120 settlers over 985 miles of uncharted river. Along the way they shot treacherous rapids, and crossed dangerous shoals while hostile Indians waited along the banks for a boat to flounder. Some were killed, but most arrived safely at the site of settlement.

Donaldson's son with his new bride were among the survivors. With the exuberance of youth, they dubbed the river voyage their "wedding journey." A more difficult one would be hard to imagine. There was still another passenger aboard the Adventurer who would be remembered. She was the Colonel's 13-year old daughter, Rachel. She was then a light-hearted little minx whose hair was black as fire coal and whose eyes were like sylvan pools

lurking in twilight shadows. As she skipped about the deck of her father's flatboat, there was certainly no hint of the influence she would have on the affairs of the yet-to-be-born nation.

Robertson did not have time to get his corn planted before Donaldson brought his fleet of flatboats to anchor at the foot of the bluff that would become the site of the future city of Nashville, Tennessee. Donaldson's party arrived on April 24, 1780.

North of the Ohio, the "Hair-buyer" had already been made a prisoner of the Americans by George Rogers Clark, but his war dance about the Council Fire of his Indian allies had stirred the tribes to a frenzy of effort to either drive the settlers back across the mountains or "make wolf-bait of their carcasses." That determination did not lessen with the fall of Vincennes.

The Indians launched an attack on Boonesborough and were driven off, but they came back later and captured "Wide Mouth" Boone himself. They surely would have tortured him to death had it not been for the Indian's peculiar habit of almost idolizing an enemy who fought well against them. After four months of captivity, Boone managed to escape and made his way back to Boonesborough.

The Indians continued to press their attacks on all the settlements until the prophecy of Dragging Canoe was fulfilled a hundred fold. When the Natchez refugees arrived there in 1781 the stockade was still under siege.

By the time James Robertson's son Jonathan was twelve years old, he had long filled the role of a man in defense of the fort. Twelve is a tender age for a boy, even in 1780, to have killed his quota of men, but the frontier gave no quarter and provided no compassion. A boy quickly became inured to death or he died.

The land between the Tennessee River and the Cumberland was not claimed by any specific tribe. That which is now Middle Tennessee and much of Kentucky was a communal hunting ground. Tribes from the sur-

rounding areas hunted there on an equal basis, and Robertson and his settlers were subject to harassment from any roving band who happened to pass close to the settlement.

A small hunting party would not attack the main settlement. That was left to the larger war parties, but a small group of hunters slipping silently through the forest would not pass up an opportunity to pick up the scalp of a farmer found working alone in his field, set fire to an isolated cabin, drive off livestock, or burn a crop standing in a field.

The years 1780 and 1781 were critical to the new settlement. Within the first month after Donaldson brought the settlers to the new site, they sustained a number of casualties from Indian attack.

The case of John Rains shows how these attacks affected the development of the settlement. Rains was the first of the new arrivals to mark off his land and start to develop a farm. He was anxious to get settled, so he built a cabin and started to live on his land at some distance from the other settlers. Three months later, he learned that several settlers, isolated like himself, had been killed by Indians. Afraid of losing his own life, he moved back into the main settlement. It was then three years before he dared to move back to his own cabin.

The constant danger forced the settlers to organize for their own protection. In May of 1780 they entered into a compact called the Government of Notables. According to the compact, the Government was to: regulate the entries and location of land; protect and provide for children and widows of those who died or were killed by the Indians, and provide for the defense of the settlement against Indian attack.

As a measure for the common safety, the new Government erected a fort. This was not done without a certain amount of grumbling from those whose labor was demanded. All settlers resented the time work on the fort required them to be away from their fields.

By 1782 Indian attacks on

Nashboro and neighboring settlements reached a point where the settlers started to think about abandoning the area. Robertson advised them to hold out. It would be both difficult and dangerous to move so many people to a new site, he told them, and in reality they had only two choices.

"Fight it out here, or fight our way out of here."

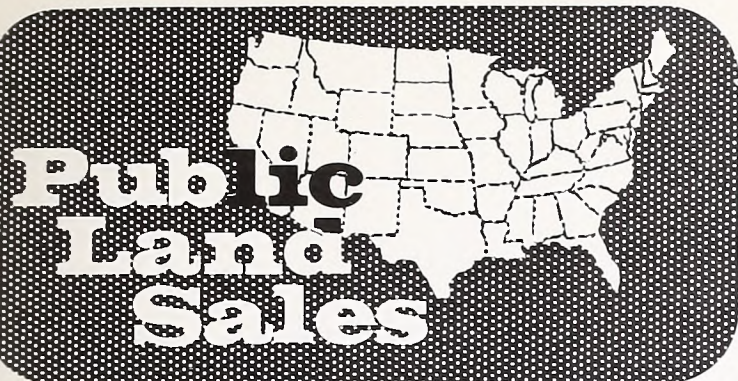
He also argued that the threat from the Indians would be the same anywhere they found fertile soil. A few did leave, but most elected to stay.

"Fight it out here," became their motto.

An accounting of the Indian troubles should not overshadow the fact that the western settler was there to acquire land. Judge Henderson still held out hope that Congress would recognize his Transylvania Company. In the Fall of 1782 word reached the settlement that the American forces had defeated the British at Yorktown, and the hope was renewed. In the light of these hopes, the Company continued to sell land to the settlers. A major portion of the Articles of Agreement was concerned with the details of claiming and recording land sales. Under the Articles, a settler would buy up to 1,000 acres of land for \$10, making the price 1¢ per acre. To Henderson's credit, we should note that all land sales were conditional on the acceptance of the Company's claim by Congress.

The claim was never recognized, but it was a dream that launched the Nation's westward expansion. The settlers at Nashboro and Boonesborough had proven that once a settlement was entrenched, the most relentless Indian attack could not root it out. It was a lesson that would lead others to venture into the west in the years that followed the Revolution.

As a promoter of western settlement, James Robertson stands out in one notable respect, he was one of the few who did not become wealthy in the process. In almost every respect his real interest was in the welfare of those who came to settle.



Adjoining landowners have first rights in purchasing public land advertised for sale, and in many cases will prefer to exercise this right.

This is a compilation of the most up-to-date information possible on up-coming sales of public lands by State Offices of the Bureau of Land Management. For details of land descriptions, prices, and other information pertinent to sales, you must write the individual State Office concerned. In most cases, there are adjoining land-owners who have statutory preference rights and may wish to exercise them to buy the land. Sales notices will point out, insofar as possible, problems relating to (1) access, (2) adjoining owner preference rights, (3) small-tract sales limitation of one per customer, and other pertinent information. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Sales listed can be canceled on short notice for administrative and technical reasons. A listing of BLM State Offices with addresses is found on this page.

CALIFORNIA

20 acre parcel in Calaveras County, California. Gentle topography and suitable for speculative investment and/or homesite. No public road access. Appraised value \$5,500. Sale April 1, 1976, 10 a.m. Refer to CA 3256.

39.46 acre parcel in Calaveras County, California. Mainly covered with brush and lava outcroppings, but has fairly good building site. Access via paved county road. Appraised value, \$15,000. Sale April 1, 1976, 10 a.m. Refer to S 3747.

MONTANA

80-Acres located in Meagher County, 12 miles SW White Sulphur Springs. Hilly with several deep coulees. El 6200 ft. Partial forested with Douglas Fir, rest in native grasses. Several springs in southern portion of tract. Rainfall about 14 inches. Snowfall averages 50 inches. No legal access. Sale February 26. Refer to M 25912. Write Montana State Office for additional details.

Alaska

Public lands in Alaska are not available for sale at this time. Future public land sales will be announced in this space when scheduled.

BUREAU OF LAND MANAGEMENT

ALASKA:
555 Cordova St.
Anchorage, Alaska
99501
District Manager
P.O. Box 1150
Fairbanks, Alaska
99701

ARIZONA:
Federal Bldg.,
Room 3022
Phoenix, Ariz. 85025

CALIFORNIA:
2800 Cottage Way,
Room E-2841
Sacramento, Calif.
95825

COLORADO:
1600 Broadway
Room 700
Denver, Colo. 80202

IDAHO:
Federal Bldg.,
Room 334
550 W. Fort St.
Boise, Idaho 83702

MONTANA (N. Dak.,
S. Dak.):
Federal Bldg.
316 North 26th St.
Billings, Mont. 59101

NEVADA:
Federal Bldg.,
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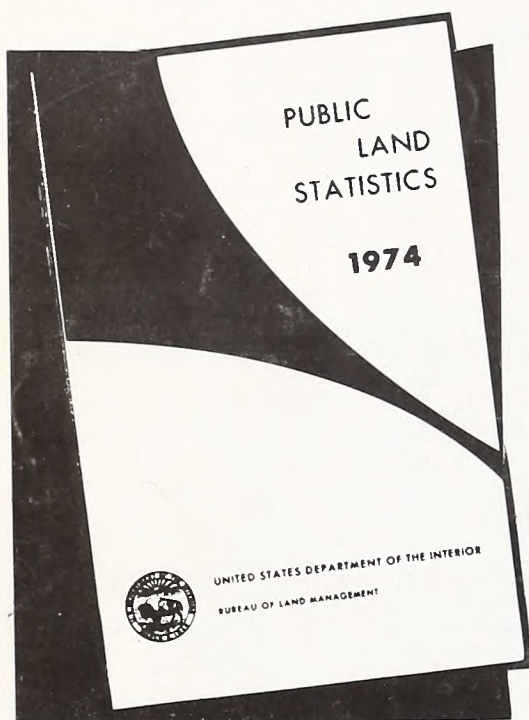
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